

Northwest Arkansas Community College
(Health Professions Division)

Discipline Code

FIRE

Course Number

1003

Course Title

Introduction to Fire Science

Catalog Description

This course will study the philosophy and history of fire science, the review and analysis of fire losses, the introduction to fire protection agencies, career possibilities, the use of protective clothing and equipment, the use and identification of basic fire fighting equipment, and current technological developments.

Prerequisites

None

Credit Hours

3 credit hours

Contact hours

45 lecture contact hours

Load hours

3 load hours

Semesters Offered

Fall

ACTS Equivalent

None

Grade Mode

A-F

Learning Outcomes

Students completing this course will:

- Describe and discuss the components of the history and philosophy of the modern fire service.
- Analyze the basic components of fire as a chemical reaction, the phases of fire growth, and the factors that influence its growth and spread.

- Differentiate between fire service training and education, including certificate and degree programs, and explain the value of education as it relate to the fire service today.
- List and describe major organizations that provide emergency response and their interrelation.
- Identify fire protection and related careers in both the public and private sectors.
- Synthesize the role of the various national, state, and local support organization related to fire protection.
- Discuss the scope, purpose, and organizational structure of fire and emergency services.
- Describe the common type of fire and emergency apparatus, equipment, and facilities.
- Demonstrate knowledge of effective management concepts for various emergency operations.
- Identify and explain the various components of fire prevention and fire protection systems.

General Education Outcomes Supported

- Students develop higher order thinking skills.

Standard Practices

Topics list

- The Making of a Firefighter
- Fire and Emergency Services as a Career
- Roles of Fire and Emergency Services Personnel
- Early Traditions and History
- Fire Prevention, Safety, Public Education and Fire Investigation
- Scientific Terminology
- Building Construction
- Fire Detection, Alarm and Suppression Systems
- Fire and Emergency Services Apparatus, Equipment, and Facilities
- Fire Department Organization and Management

Assessments

- Complete course requirements via written exams with a minimum cumulative grade of 70%.

Revision Date March 5, 2020

